

**REMARKS**

In the Office communication, the examiner issued a cascading set of restriction/election requirements affecting all pending claims. Applicants submit their elections herein, but wish to traverse various restriction requirements according to the arguments that follow. Applicants amend the current claims by presenting new claims 21-42 to be able to better comply with the examiner's requirement #9 under which the applicants must list claims "readable on" each elected species.

Before getting into elections and traversal arguments, Applicants respectfully point out that none of the embodiments of the invention are properly classified in class 367, because that class covers electric signals that result from detection of acoustic waves, wherein the electric signal represents the information or intelligence communicated by the acoustic waves from their travel through elastic media. Applicants' invention acts on acoustic waves while they are acoustic waves, and before they are detected by a geophone or other transponder that converts the response into an electrical signal.

Being forced to comply under protest with the election requirements as set forth by the examiner, Applicants elect the following particular embodiments, numbered according to the Office communication's numbered sections:

1. Method claims
3. Coating the chemical additive on the diffuser before use
4. Chemical additive has bubble coalescence retardation properties
5. The diffuser is a perforated hose made from polymeric material
6. Preconditioning the diffuser by soaking in salt water before coating
8. The chemical additive is Pluronic L81.

Numbered section 2 in the Office communication does not require an election. The election required in numbered section 7 is not applicable to the election Applicants make above in numbered paragraph 3.

Applicants' traversal arguments follow, along with the section 9 listing of all claims readable on each elected "species."

1. Claim 21 is a method claim that Applicants believe is generic to at least all "species" identified by the examiner in items 4-6 and 8, and to two of the "species" identified in item #3 (coating on the diffuser and blending into the diffuser during fabrication). Claims 21-42 are all readable on Applicants' election #1. Applicants protest the use of the word *species* to refer to certain different embodiments of the inventive method. Some of the embodiments characterized as different species do not satisfy the mutual exclusivity requirement of MPEP 806.04(f). For instance, none of the following four embodiments are mutually exclusive: (i) coating chemical additive on to the diffuser; (ii) blending additive into the diffuser fabrication process; (iii) injecting additive to the water near where bubbles are emitted by the diffuser; and (iv) mixing additive in with the air before making bubbles. Similarly, additives exist or can be prepared that have both bubble coalescence retardation properties and wetting agent properties. Further, a diffuser may be preconditioned both by soaking in water and by bubbling in water; in fact, bubbling necessarily implies soaking. These examples are different embodiments, not different species. No election is believed to be required in these instances based on genus/species logic.

3. Claims 22 and 24-35 are readable on Applicants' elections #1 and 3. Applicants believe that claims 22 and 23 are generic to at least all "species" identified by the examiner in items 4-6 and 8.

4. Claims 24-35 are readable on Applicant's elections #1, 3 and 4. Applicants believe that claim 24 is generic to all "species" identified by the examiner in items 5-6 and 8, as well as to other species/embodiments not specifically mentioned

in the claims such as diffusers that are not hoses, or are hoses but not made of either polymeric or elastomeric material.

5. Claims 26 and 28-35 are readable on Applicants' elections #1, 3-5. Applicants believe that claims 25-27 are generic to at least all "species" identified by the examiner in items 6 and 8.

6. Claims 29-35 are readable on Applicants' elections #1, 3-6. Applicants believe that claims 28-30 are generic to all species identified by the examiner in item 8 as well as to other suitable additives not mentioned by name in the application.

8. Claim 33 is readable on every election made by Applicants above.

New claims 36-42 are drawn to different possible elections under item #3, and are included because Applicants are not persuaded that claim 1 is not an allowable claim that is generic to all the embodiments identified in item #3. Applicants incorporate by reference all arguments made about the number of restriction/election requirements in Applicants' previous response mailed on August 31, 2005.

## CONCLUSION

Applicants believe that claim 1 is an allowable and generic claim, all embodiments of which spring from the same, single inventive concept: using chemical additives to create and maintain small bubbles to form a bubble "curtain" of sufficient duration (i.e., slow rise time) to be useful in suppressing surface-related multiple reflections in marine seismic surveys. In the alternative, Applicants believe that claim 21 is an allowable and generic claim. In the further alternative, Applicants present above several other progressively narrower claims also believed to be allowable, easily searchable, and generic, all the way down to the narrow scope of claim 33, which is responsive to every election required by the examiner in the Office communication. Certainly claim 33 is drawn to an important embodiment of Applicants' invention, but as Applicants have demonstrated above, it is but one of many embodiments of the invention that Applicants are entitled to claim. If the examiner wishes to discuss this application with counsel, please contact the undersigned.

Respectfully submitted,

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